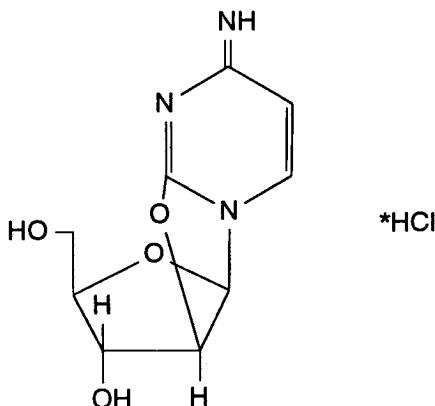


CYCLOCYTIDINE HYDROCHLORIDE

NSC - 145668



Chemical Name:

2,3,3a,9a-Tetrahydro-3-hydroxy-6-imino-6*H*-furo(2',3':4,5)-oxazolo(3,2-*a*)pyrimidine-2-methanol, -, monohydrochloride

Other Names:

Cyclo-C; Cyclocytidine hydrochloride

CAS Registry Number: 10212-25-6

Molecular Formula: C₉H₁₁N₃O₄·HCl

M.W.: 261.7

Approximate Solubility: (mg/mL)

H ₂ O	200
EtOAc	< 0.1
CHCl ₃	< 0.1

Stability:

Bulk:

A sample stored at 60 °C for 30 days showed no decomposition as indicated by optical rotation.

Solution:

A 1% solution in water after 24 hours at room temperature showed no decomposition as indicated by optical rotation.

High Performance Liquid Chromatography:

Column: μBondapak C₁₈, 300 x 3.9 mm i.d.

Mobile Phase: 1.5% acetic acid in water with 0.075 M heptanesulfonic acid

Flow Rate: 1.0 mL/min

Detection: UV at 254 nm

Sample Preparation: Sample concentration - 1.0 mg/mL

Retention Volume: 8.2 mL (NSC - 145668)

Ultraviolet Absorption:

(H₂O)

λ_{\max}

231 ± 2 nm
263 ± 2 nm

ϵ

9,300 - 9,700
10,400 - 10,800

Optical Rotation:

(c=2, H₂O)

$[\alpha]_D^{20} = -22 \pm 2^\circ$

Toxicity Data:

Mouse(iv): LD₅₀: 800 mg/kg
Drugs in Japan. Ethical Drugs, 6,55,(1982)

Dog(iv): LD₅₀: 344 mg/kg
Oyo Yakuri, Pharmacometrics, 8,353,(1974)

Monkey (iv): LD₅₀: 1045 mg/kg
Oyo Yakuri. Pharmacometrics, 8,353,(1974)